

In the Claims:

Please amend claims 1, 6, 7, 8 and 12-14, and cancel claims 4, 5, 10 and 11 without prejudice. The status of all claims is as follows:

1. (Currently Amended) A parallel process execution method with which a plurality of processors execute a plurality of parallel processes produced from a parallel program together with other processes in a time-shared fashion, the method comprising the steps of:

(a) setting a time allocation ratio that determines how much of a given cycle period should be allocated for execution of the parallel program;

(b) providing a set of criteria including a throughput-first policy which allows batch processes to run in the free time slot, and a turnaround-first policy which allows no batch process to run in the free time slot;

(c) according to the criteria, selecting at each of the processors which process to be executed in the free time slot;

(b)(d) assigning each parallel process of the parallel program to one of the plurality of processors, and starting execution of the assigned parallel processes simultaneously on the plurality of processors; and

(e)(c) stopping the execution of the assigned parallel processes simultaneously on the plurality of processors, when the time elapsed since the start of the parallel processes has reached a point that corresponds to the time allocation ratio that has been set to the parallel program.

2. (Original) The parallel process execution method according to claim 1, wherein said setting step (a) sets the time allocation ratio to the parallel program by dividing the given cycle period into a plurality of time slots and determining which process to execute in each time slot of the different processors.

3. (Original) The parallel process execution method according to claim 2, wherein the processes to be executed in the time slots include interactive processes.

4. (Cancelled)

5. (Cancelled)

6. (Currently Amended) The parallel process execution method according to ~~claim 5~~ claim 1, wherein the throughput-first policy gives successively lower priorities to interactive processes, non-parallel processes for execution on a single processor, and parallel processes.

7. ~~7.~~ (Currently Amended) The parallel process execution method according to claim 1, wherein the processors are ~~distributed over~~ grouped into a plurality of nodes, and the method further comprises the steps of:

causing simultaneous interrupts to the nodes;

sending the received interrupts simultaneously to every processor in the nodes; and

causing the processors to start the cycle period in phase with the interrupts.

8. (Currently Amended) A multiprocessor computer which employs a plurality of processors to execute a plurality of parallel processes produced from a parallel program together with other processes in a time-shared fashion, comprising:

a time allocation ratio setting unit that sets a time allocation ratio that determines how much of a given cycle period should be allocated for execution of the parallel program, and provides a set of criteria including a throughput-first policy which allows batch processes to run in the free time slot, and a turnaround-first policy which allows no batch process to run in the free time slot; -and

a process execution unit that causes each of the processors to select, according to the criteria, which process to execute in the free time slot, assigns each parallel process of the parallel program to one of the plurality of processors, starts execution of the assigned parallel processes simultaneously on the plurality of processors, and stops the execution of the assigned parallel processes simultaneously on the plurality of processors when the time elapsed since the start of the parallel processes has reached a point that corresponds to the time allocation ratio.

9. (Original) The multiprocessor computer according to claim 8, wherein said time allocation ratio setting unit divides the given cycle period into a

plurality of time slots and determines which process to execute in each time slot of the different processors.

10. (Cancelled)

11. (Cancelled)

12. (Currently Amended) A multiprocessor computer ~~which employs a plurality of processors to execute~~ system for executing a plurality of parallel processes produced from a parallel program together with other processes in a time-shared fashion, ~~the plurality of processors being distributed over a plurality of nodes,~~ the multiprocessor computer system comprising:

a plurality of nodes, each comprising at least one processor; and

a coordination controller that generates interrupt notifications to ~~a~~ the plurality of nodes simultaneously;

wherein the node comprises:

a time allocation ratio setting unit that sets a time allocation ratio that determines how much of a given cycle period should be allocated for execution of the parallel program; and

~~a plurality of process execution units each of which is disposed in the plurality of nodes,~~ unit assigns each parallel process of the parallel program to ~~one of the plurality of processors,~~ starts execution of the assigned parallel processes simultaneously on the ~~plurality of processors,~~ and stops the execution of the assigned parallel processes

simultaneously on the plurality of processors when the time elapsed since the start of the parallel processes has reached a point that corresponds to the time allocation ratio.

13. (Currently Amended) A parallel process execution program for use with a plurality of processors to execute a plurality of parallel processes produced from a parallel program together with other processes in a time-shared fashion, the program causing a computer to perform the steps of:

setting a time allocation ratio that determines how much of a given cycle period should be allocated for execution of the parallel program;

providing a set of criteria including a throughput-first policy which allows batch processes to run in the free time slot, and a turnaround-first policy which allows no batch process to run in the free time slot;

according to the criteria, selecting at each of the processors which process to be executed in the free time slot;

assigning each parallel process of the parallel program to one of the plurality of processors, and starting execution of the assigned parallel processes simultaneously on the plurality of processors; and

stopping the execution of the assigned parallel processes simultaneously on the plurality of processors, when the time elapsed since the start of the parallel processes has reached a point that corresponds to the time allocation ratio that has been set to the parallel program to allocate the given cycle period.

14. (Currently Amended) A computer-readable medium storing a program for use with a plurality of processors to execute a plurality of parallel processes produced from a parallel program together with other processes in a time-shared fashion, the program causing the computers to perform the steps of:

setting a time allocation ratio that determines how much of a given cycle period should be allocated for execution of the parallel program;

providing a set of criteria including a throughput-first policy which allows batch processes to run in the free time slot, and a turnaround-first policy which allows no batch process to run in the free time slot;

according to the criteria, selecting at each of the processors which process to be executed in the free time slot;

assigning each parallel process of the parallel program to one of the plurality of processors, and starting execution of the assigned parallel processes simultaneously on the plurality of processors; and

stopping the execution of the assigned parallel processes simultaneously on the plurality of processors, when the time elapsed since the start of the parallel processes has reached a point that corresponds to the time allocation ratio that has been set to the parallel program to allocate the given cycle period.